

A B S T R A C T

As and B are implanted to side surfaces of
trenches 3 by a rotation ion implanting method, and by
using a difference between these impurities in
5 diffusion coefficient, the structure in which
an n⁻-type epitaxial Si layer is interposed between
trenches 3 is converted into a semiconductor structure
consisting of n-type pillar layer 5/p-type pillar
layer 4/n-type pillar layer 5 lining up. The structure
10 can function substantially the same role as that of
a super junction structure.